

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 02/10/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,540	09/03/2004	Yoshitada Oshida	520.44257X00	1191
20457	7590 02/10/2006		EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			RUTLEDGE, DELLA J	
SUITE 1800	00 NORTH SEVENTEENTH STREET ITE 1800		ART UNIT	PAPER NUMBER
ARLINGTON	, VA 22209-3873	2851		

Please find below and/or attached an Office communication concerning this application or proceeding.

'						
	Application No.	Applicant(s)				
	10/506,540	OSHIDA ET AL.				
Office Action Summary	Examiner	Art Unit				
	D. Rutledge	2851				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MAILING THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) This action is FINAL . 2b) ☑ This	action is non-final.					
3) Since this application is in condition for allowar	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3,5,7-12,14-17 and 19-23 is/are rejection of the company of th	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 03 September 2004 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage				
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 09 & 12/04.	4) Interview Summary (Paper No(s)/Mail Da 5) Notice of Informal Pa					

Application/Control Number: 10/506,540 Page 2

Art Unit: 2851

DETAILED ACTION

Declaration

An executed combined Declaration and Power of Attorney was received on 28
 October 2004.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings filed on 03 September 2004 are acceptable for examination.

Specification

4. Has the component 100 been described in the specification? If so, please provide the page and line number(s).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1 3, 5, 7 12, 14 17, 19 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Okazaki et al. (US Pub. No. 2005/0281516).

Application/Control Number: 10/506,540

Art Unit: 2851

The reference, in at least Fig. 23, has an exposure apparatus with an illumination system having plurality of light sources (may be lasers 110); a light integrator 114 comprised of rod shaped lens; condenser lens 120 for overlapping the light; the sources have a shape analogous to the shape of the region to be illuminated - Claims 2, 2, 10 - 12, 15- 17, 19, 22. A DMD modulates the light (see paragraphs [0096 – 0099]) – Claims 5, 14

The energy of the light is inherently controlled – Claims 7, 22

The condenser lens will diverge the light beams - Claims 3, 17, 21

The light rays are caused to enter an associated position with the integrator - Claim 8

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 10/506,540 Page 4

Art Unit: 2851

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki et al. (US Pub. No. 2005/0281516).

The reference does not disclose detecting the intensity, but one of ordinary skill in the art would be motivated to detect the intensity of the light to control the exposure.

Allowable Subject Matter

- 10. Claims 4, 6, 13 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 11. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose a ratio as claimed.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohmori et al. (US Pub. No. 2005/0254034) discloses an exposure device with an illumination system having plural light sources, a fly's eye integrator and a spatial light modulator.

Response Data

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Rutledge whose telephone number is (571) 272-2127. The examiner can normally be reached on Mon - Thurs, 6:00 AM - 4:30 PM.

Application/Control Number: 10/506,540

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Rutledge Primary Examiner

Art Unit 2851

dr 2/6/06